DAILY FIELD ACTIVITY REPORT

PROJECT NAME: Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

DATE: July 27, 2018	**WEATHER:** Mostly Sunny, High ~92 degrees F (high temperature outdoors)

Personnel and Visitors Onsite:
Core Processing– CDM Smith: Mark Jusayan; AECOM: Anthony Palmieri, Rebecca Tortorello, Anders Utter; Geosyntec: Jed Sirk, Alison Clements, Lucas Evans;

Research vessel Cayuse – CDM Smith: Libby Miner; Geosyntec: Luke Smith; Gravity Marine: Mike Duffield, Ryan McEliese; AECOM: Michaela McCoog

Planned Activity:

- Process remaining cores collected on 7/26/18 at the sample processing facility.
- Surface sediment sampling

Activity Completed:

Mark Jusayan performed oversight of core processing at the AECOM sample processing facility from 08:00 to 14:05. Activities completed by the AECOM/Geosyntec team at the sample processing facility are as follows:

- AECOM led the daily health and safety meeting discussing proper lifting techniques, slips/trips/falls, and proper use and maintenance of cutting tools.
- The PID was calibrated with 100 ppm isobutylene.
- A total of 13 sediment samples, one duplicate, and one MS/MSD were collected from the sediment cores at 3 locations as summarized below.
- The sediment cores were photographed, screened with a photoionization detector (PID), described in a field log following soil classification procedures in the FSP, and geotechnical field tests were performed on the cores.
- All reusable equipment was decontaminated with a three-stage decontamination procedure including a tap water rinse, followed by an Alconox scrub, and finally a deionized water rinse. The initial tap water rinse water was containerized in a labeled 55-gallon drum.

Libby Miner performed oversight of surface sediment sampling from 07:00 to 15:40 on board the Cayuse. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- Position check at PH-2 indicated that the vessel GPS was reading within 1.6 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.
- 3-point composite surface sediment samples were collected from 3 D/U locations between RM 27 and 28 in the D/U reach as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.

Status of Schedule & Priority Work:

- Surface sediment sampling will continue on 7/28/18
- There will be no work on 7/29/18 due to hot weather forecasted.
- Sediment core collection will resume on Monday (7/30/18) and core processing will resume at the sample processing facility on Tuesday (7/31/18).

Issues/Concerns/Resolutions (include work performed that was not planned or anticipated):

- The lead core logger for today was observed using the term, “very moist” for moisture content in a sediment core log. Oversight staff mentioned to AECOM and Geosyntec staff that additional descriptors to moisture content such as, “very/slight/moderate” are not standard USCS terminology and are not consistent with the FSP. AECOM and Geosyntec agreed and removed, “very” from the moisture descriptions.

- Only a 1-point composite of surface sediment was able to be collected from B481 due to heavy debris. Probing was performed to try to locate better conditions but was ultimately unsuccessful.

- A position check was performed in the morning on the Cayuse’s GPS system at the control point in Swan Island Lagoon. The boat was then towed to Willamette Park in West Linn for sampling. At the end of the day, the boat was towed to Swan Island for another position check.

Samples Collected, Measurements Made, Photographs: (List Locations, Matrix & Sample type):
No EPA split samples were collected.

Borings Completed (Include total footage drilled for each boring):

Core processing of the remaining cores collected on 7/26/18 was completed, including photographic documentation of the cores, lithologic logging, screening with a PID, geotechnical field tests, and sediment sampling was conducted at the sample processing facility and samples were collected from the following depth intervals for laboratory analysis for borings SC-S024, SC-S028, SC-S163 cores. All depth measurements are based on recovered core length (not penetrated depth):

SC-S024

- 0-2 FT: very dark gray silt, PID reading = 0 ppm, trace creosote-like odor,
- 2-4 FT: black sand and black silty sand, PID reading = 0 ppm,
- 4-6 FT: black sand, PID Reading = 0 ppm,

SC-S028

- 0-2 FT: very dark gray silt with sand, PID reading = 0 ppm,
- 2-3.2 FT: very dark gray silt with sand, PID reading = 0 ppm,
- 3.2-5.7 FT: black sand with silt, PID Reading = 0 ppm, duplicate collected,
- No odor throughout core.

SC-S163

- 0-2 FT: very dark gray silt, PID reading = 0 ppm,
- 2-4 FT: very dark gray silt, PID reading = 0 ppm,
- 4-6 FT: very dark gray silt, PID reading = 0 ppm, slight creosote-like odor, slight sheen from 4-6.5 feet, extra volume for an MS/MSD was collected,
- 6-8 FT: very dark gray silt, PID reading = 0 ppm, slight creosote-like odor,
- 8-10 FT: very dark gray silt, PID reading = 1.8 ppm at approximately 9 feet, slight creosote-like odor,
- 10-12.7 FT: very dark gray silt, PID reading = 0 ppm, slight creosote-like odor,
- 12.7-13 FT: dark gray silty sand, PID reading = 0 ppm, slight creosote-like odor

On the core logging forms, depths based on recovered core length and “in-situ depths” (actual depths estimated by the observed percent recovery or percent compaction) are both shown.

On the Cayuse, sediment samples were collected at the following sampling locations:

- PDI-SG-B481 – within 50-ft radius, ~RM 27, fine sandy silt, 1-point composite
- PDI-SG-B485 – within 25-ft radius, ~RM 27, silt with trace fine sand
- PDI-SG-B482 – within 25-ft radius, ~RM 27, sandy silt
- PDI-SG-B484 – within 25-FT radius, ~RM 27, sandy silt

Note: Sediment descriptions are simplified and AECOM/Geosyntec provided more detailed sediment descriptions in their sampling notes.

A rinsate blank was collected from deionized water rinse from a decontaminated bowl and spoon.

Photographs of work were taken throughout the day and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.

Wastes Generated and How Handled:

- Sediment from processed cores that were not retained for sampling were containerized in labeled 55-gallon drums.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed daily for disposal in a municipal waste management dumpster.

Health and Safety Issues, Equipment Needs, Staffing:
None.

Signature: Mark Jusayan, Libby Miner **DATE** July 27, 2018